

Abstract of the Disclosure

A method dynamically allocates bandwidth for traffic having a variable data rate in a network. A data rate of the traffic received from the network is measured during fixed length time intervals. A predetermine number of consecutive data rates are grouped into overlapping vectors. A discrete wavelet transform is applied to each overlapping vector to determine frequency bands for each vector, and the frequency bands of each vector are analyzed to determine an associated energy of the data rate. Then, the bandwidth is allocated to the traffic according to the associated energy when the traffic is transmitted.